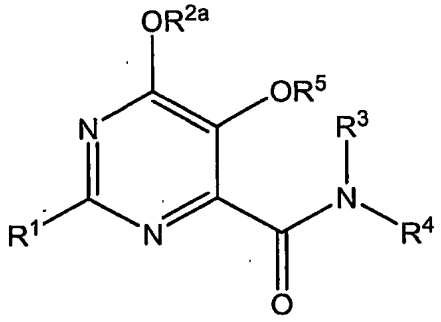
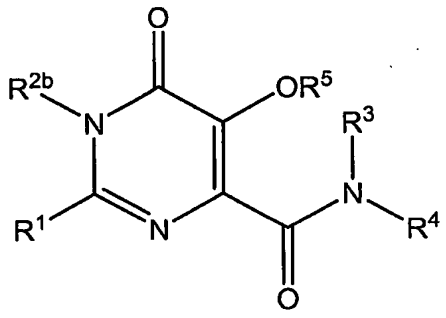
What Is Claimed:

1. A compound selected from Formulas I and II:



I



II

or a pharmaceutically acceptable salt thereof, and including all enol, tautomeric, and resonance isomers, enantiomers, diastereomers, and racemic mixtures thereof;

wherein:

R^1 is selected from H, F, Cl, Br, I, OH, OR, amino ($-NH_2$), ammonium ($-NH_3^+$), alkylamino (–NHR), dialkylamino ($-NR_2$), trialkylammonium ($-NR_3^+$), carboxyl ($-CO_2H$), sulfate, sulfamate, sulfonate, 5-7 membered ring sultam, 4-dialkylaminopyridinium, alkylsulfone ($-SO_2R$), arylsulfone ($-SO_2Ar$), arylsulfoxide (–SOAr), arylthio (–SAr), sulfonamide ($-SO_2NR_2$), alkylsulfoxide (–SOR), formyl (–CHO), ester ($-CO_2R$), amido ($-C(=O)NR_2$), 5-7 membered ring lactam, 5-7 membered ring lactone, nitrile (–CN), azido ($-N_3$), nitro ($-NO_2$), C_1–C_{18} alkyl, C_1–C_{18} substituted alkyl, C_2–C_{18} alkenyl, C_2–C_{18} substituted alkenyl, C_2–C_{18} alkynyl, C_2–C_{18} substituted alkynyl, C_6–C_{20} aryl, C_6–C_{20} substituted aryl, C_2–C_{20} heterocycle, and C_2–C_{20}

substituted heterocycle, phosphonate, phosphate, polyethyleneoxy, a protecting group, L–A^3, and a prodrug moiety;

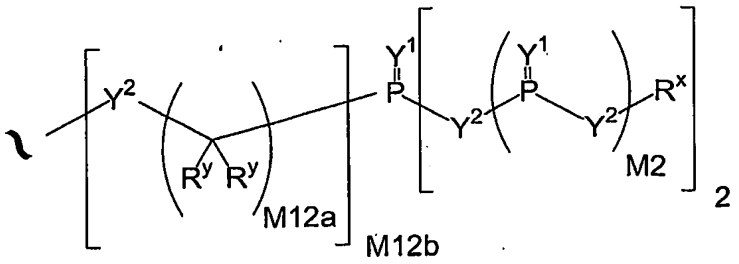
R^{2a} and R^5 are each independently selected from H, carboxyl (–CO_2H), sulfate, sulfamate, sulfonate, 5-7 membered ring sultam, 4-dialkylaminopyridinium, alkylsulfone (–SO_2R), arylsulfone (–SO_2Ar), arylsulfoxide (–SOAr), arylthio (–SAr), sulfonamide (–SO_2NR_2), alkylsulfoxide (–SOR), formyl (–CHO), ester (–CO_2R), amido (–C(=O)NR_2), 5-7 membered ring lactam, 5-7 membered ring lactone, nitrile (–CN), azido (–N_3), nitro (–NO_2), C_1–C_{18} alkyl, C_1–C_{18} substituted alkyl, C_2–C_{18} alkenyl, C_2–C_{18} substituted alkenyl, C_2–C_{18} alkynyl, C_2–C_{18} substituted alkynyl, C_6–C_{20} aryl, C_6–C_{20} substituted aryl, C_2–C_{20} heterocycle, and C_2–C_{20} substituted heterocycle, phosphonate, phosphate, polyethyleneoxy, a protecting group, L–A^3, and a prodrug moiety;

R^{2b}, R^3, and R^4 are each independently selected from H, OH, OR, amino (–NH_2), ammonium (–NH_3^+), alkylamino (–NHR), dialkylamino (–NR_2), trialkylammonium (–NR_3^+), carboxyl (–CO_2H), sulfate, sulfamate, sulfonate, 5-7 membered ring sultam, 4-dialkylaminopyridinium, alkylsulfone (–SO_2R), arylsulfone (–SO_2Ar), arylsulfoxide (–SOAr), arylthio (–SAr), sulfonamide (–SO_2NR_2), alkylsulfoxide (–SOR), formyl (–CHO), ester (–CO_2R), amido (–C(=O)NR_2), 5-7 membered ring lactam, 5-7 membered ring lactone, nitrile (–CN), azido (–N_3), nitro (–NO_2), C_1–C_{18} alkyl, C_1–C_{18} substituted alkyl, C_2–C_{18} alkenyl, C_2–C_{18} substituted alkenyl, C_2–C_{18} alkynyl, C_2–C_{18} substituted alkynyl, C_6–C_{20} aryl, C_6–C_{20} substituted aryl, C_2–C_{20} heterocycle, and C_2–C_{20} substituted heterocycle, phosphonate, phosphate, polyethyleneoxy, a protecting group, L–A^3, and a prodrug moiety;

R is independently selected from H, C_1–C_{18} alkyl, C_1–C_{18} substituted alkyl, C_2–C_{18} alkenyl, C_2–C_{18} substituted alkenyl, C_2–C_{18} alkynyl, C_2–C_{18} substituted alkynyl, C_6–C_{20} aryl, C_6–C_{20} substituted aryl, C_2–C_{20} heterocycle, C_2–C_{20} substituted heterocycle, phosphonate, phosphate, polyethyleneoxy, a protecting group, and a prodrug moiety;

L is selected from a bond, O, S, NR, N–OR, C_1–C_{12} alkylene, C_1–C_{12} substituted alkylene, C_2–C_{12} alkenylene, C_2–C_{12} substituted alkenylene, C_2–C_{12} alkynylene, C_2–C_{12} substituted alkynylene, C_6–C_{20} arylene, C_6–C_{20} substituted arylene, C(=O)NH, C(=O), $S(=O)_2$, C(=O)$NH(CH_2)_n$, and $(CH_2CH_2O)_n$, where n may be 1, 2, 3, 4, 5, or 6;

A^3 has the structure:



where:

Y^1 is independently O, S, NR^x, $N(O)(R^x)$, $N(OR^x)$, $N(O)(OR^x)$, or $N(N(R^x)_2)$;

Y^2 is independently a bond, O, NR^x, $N(O)(R^x)$, $N(OR^x)$, $N(O)(OR^x)$, $N(N(R^x)_2)$, -S(O)- (sulfoxide), $-S(O)_2-$ (sulfone), -S- (sulfide), or -S-S- (disulfide);

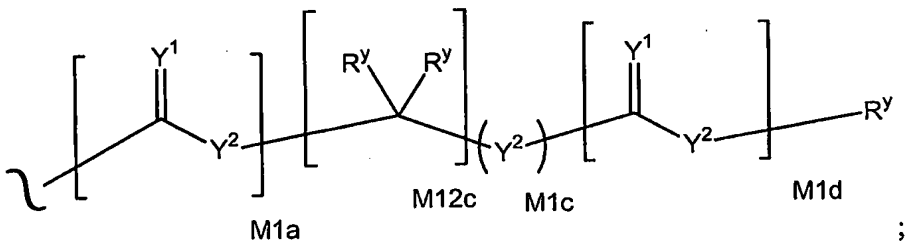
M2 is 0, 1 or 2;

M12a is 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, or 12;

M12b is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, or 12;

R^y is independently H, C_1–C_{18} alkyl, C_1–C_{18} substituted alkyl, C_6–C_{20} aryl, C_6–C_{20} substituted aryl, or a protecting group, or where taken together at a carbon atom, two vicinal R^y groups form a carbocycle or a heterocycle; and

R^x is independently H, C_1–C_{18} alkyl, C_1–C_{18} substituted alkyl, C_6–C_{20} aryl, C_6–C_{20} substituted aryl, or a protecting group, or the formula:

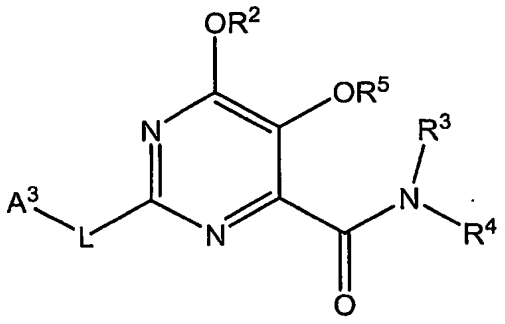


;

where M1a, M1c, and M1d are independently 0 or 1, and M12c is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12; and

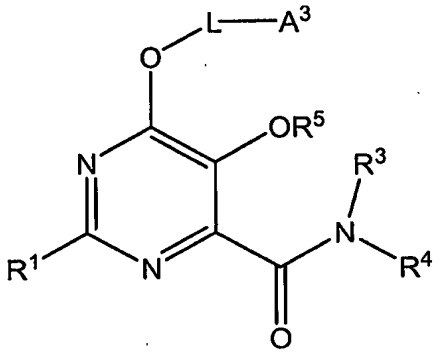
wherein at least one of R, R^1, R^{2a}, R^{2b}, R^3, R^4, and R^5 comprises a phosphonate group.

2. A compound according to claim 1 having the structure:



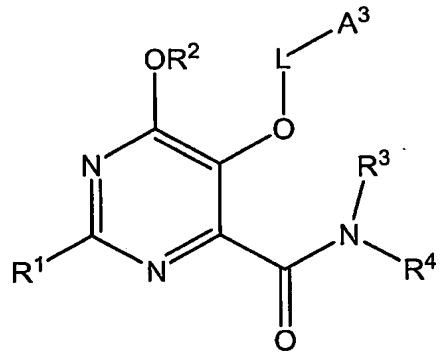
or a pharmaceutically acceptable salt thereof, and including enol and tautomeric resonance isomers.

3. A compound according to claim 1 having the structure:



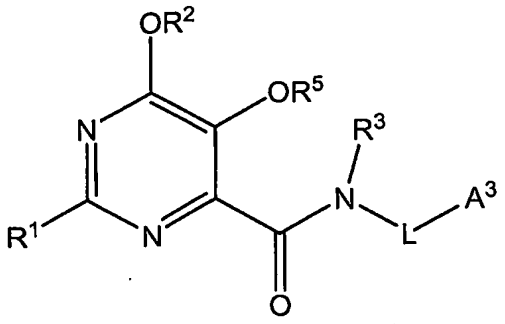
or a pharmaceutically acceptable salt thereof, and including enol and tautomeric resonance isomers.

4. A compound according to claim 1 having the structure:



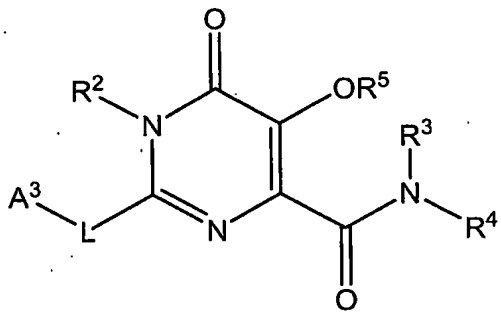
or a pharmaceutically acceptable salt thereof, and including enol and tautomeric resonance isomers.

5. A compound according to claim 1 having the structure:



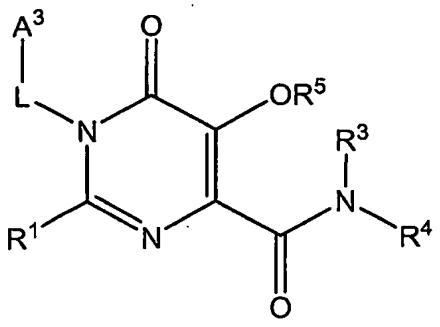
or a pharmaceutically acceptable salt thereof, and including enol and tautomeric resonance isomers.

6. A compound according to claim 1 having the structure:



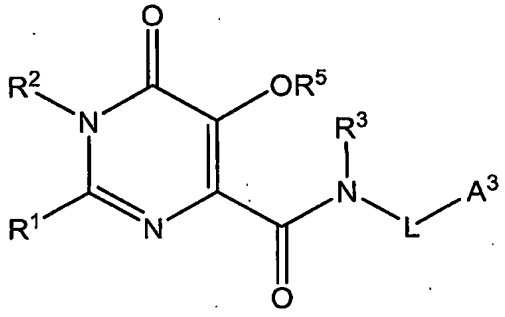
or a pharmaceutically acceptable salt thereof, and including all enol, tautomeric, and resonance isomers, enantiomers, diastereomers, and racemic mixtures thereof.

7. A compound according to claim 1 having the structure:



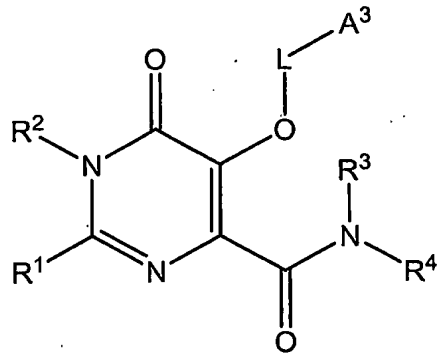
or a pharmaceutically acceptable salt thereof, and including enol and tautomeric resonance isomers.

8. A compound according to claim 1 having the structure:



or a pharmaceutically acceptable salt thereof, and including enol and tautomeric resonance isomers.

9. A compound according to claim 1 having the structure:



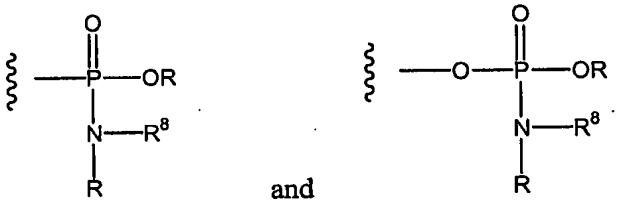
or a pharmaceutically acceptable salt thereof, and including enol and tautomeric resonance isomers.

10. The compound of claim 1 wherein substituted alkyl, substituted alkenyl, substituted alkynyl, substituted aryl, and substituted heterocycle are independently substituted with one or more substituents selected from F, Cl, Br, I, OH, amino ($-NH_2$), ammonium ($-NH_3^+$), alkylamino ($-NHR$), dialkylamino ($-NR_2$), trialkylammonium ($-NR_3^+$), C_1-C_8 alkyl, C_1-C_8 alkylhalide, carboxylate, thiol ($-SH$), sulfate ($-OSO_3R$), sulfamate, sulfonate ($-SO_3R$), 5-7 membered ring sultam, C_1-C_8 alkylsulfonate, C_1-C_8 alkylamino, 4-dialkylaminopyridinium, C_1-C_8 alkylhydroxyl, C_1-C_8 alkylthiol, alkylsulfone ($-SO_2R$), arylsulfone ($-SO_2Ar$), arylsulfoxide ($-SOAr$), arylthio ($-SAr$), sulfonamide ($-SO_2NR_2$), alkylsulfoxide ($-SOR$), ester ($-C(=O)OR$), amido ($-C(=O)NR_2$), 5-7 membered ring lactam, 5-7 membered ring lactone, nitrile ($-CN$), azido ($-N_3$), nitro ($-NO_2$), C_1-C_8 alkoxy ($-OR$), C_1-C_8 alkyl, C_1-C_8 substituted alkyl, C_6-C_{20} aryl, C_6-C_{20} substituted aryl, C_2-C_{20} heterocycle, and C_2-C_{20} substituted heterocycle, phosphonate, phosphate, polyethyleneoxy, and a prodrug moiety.

11. A compound of claim 1 wherein R^{2a} and R^{2b} are selected from H, $C(=O)OR$, $C(=O)NR_2$, $C(=O)R$, SO_2NR_2 (sulfamate), and a prodrug moiety.

12. The compound of claim 1 where R^3 or R^4 is 4-fluorobenzyl.

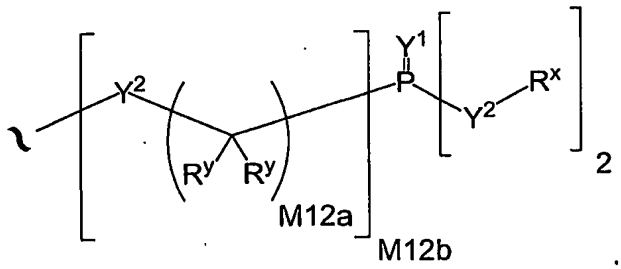
13. The compound of claim 1 wherein at least one of R^1, R^{2a}, R^{2b}, R^3, R^4, and R^5 comprise a prodrug moiety selected from the structures:



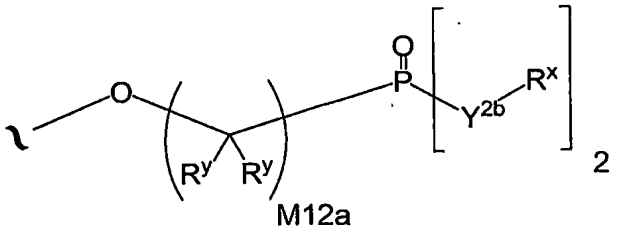
and

wherein R^8 is comprised of an ester, an amide, or a carbamate.

14. The compound of claim 1 wherein phosphonate group has the structure:

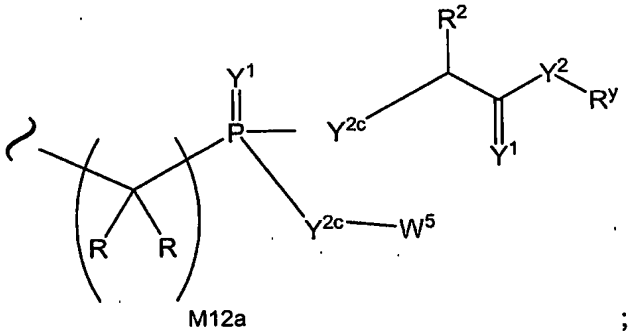


15. The compound of claim 14 wherein phosphonate group has the structure:



where Y^{2b} is O or $N(R^x)$.

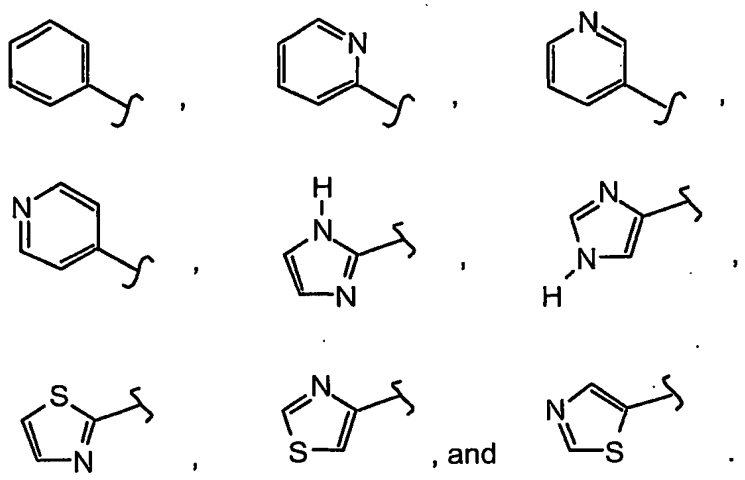
16. The compound of claim 14 wherein phosphonate group has the structure:



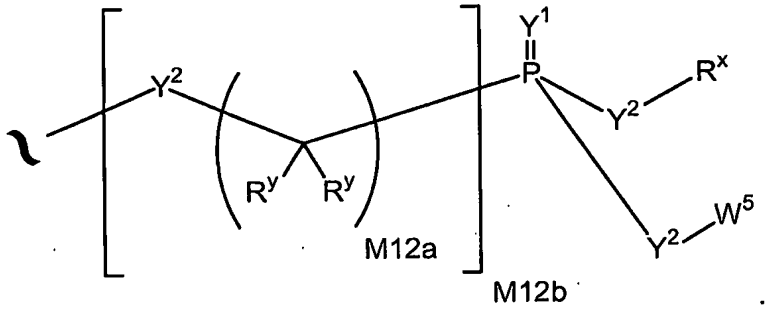
;

where W^5 is a carbocycle, and Y^{2c} is O, $N(R^y)$ or S.

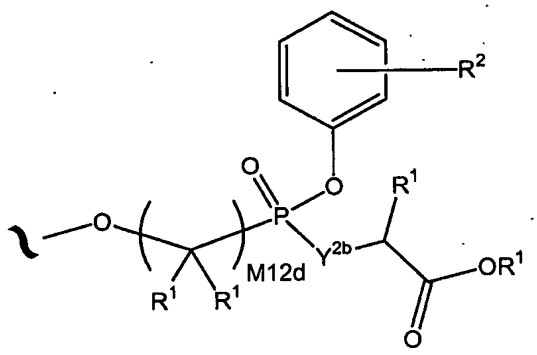
17. The compound of claim 16 wherein W^5 is selected from the structures:



18. The compound of claim 14 wherein phosphonate group has the structure:

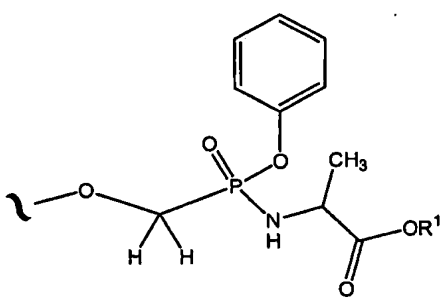


19. The compound of claim 18 wherein phosphonate group has the structure:

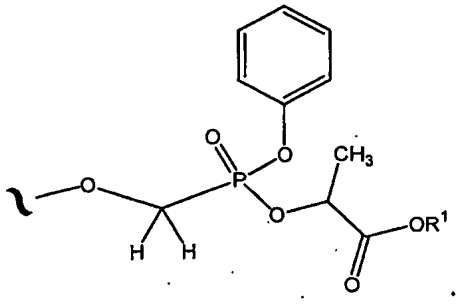


wherein Y^{2b} is O or N(R^x); M12d is 1, 2, 3, 4, 5, 6, 7 or 8; R^1 is H or C_1–C_6 alkyl; and the phenyl carbocycle is substituted with 0 to 3 R^2 groups where R^2 is C_1–C_6 alkyl or substituted alkyl.

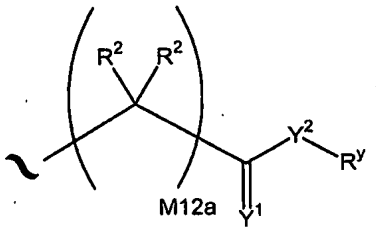
20. The compound of claim 19 wherein phosphonate group has the structure:



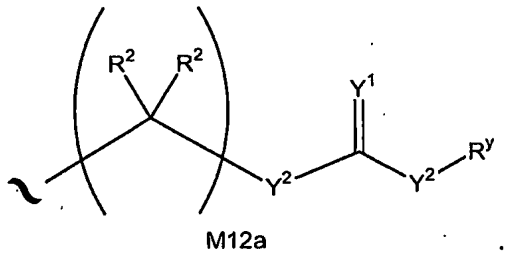
or



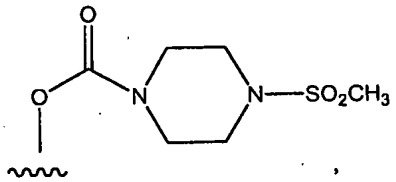
21. The compound of claim 14 wherein R^x is selected from the structures:



and



22. The compound of claim 21 wherein R^1 is selected from the structures:



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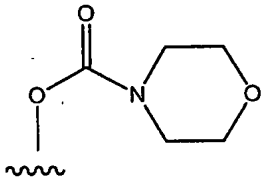
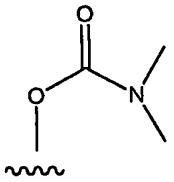
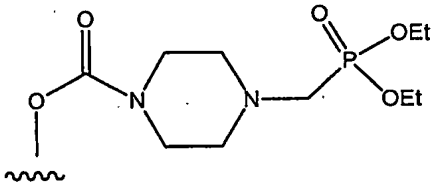


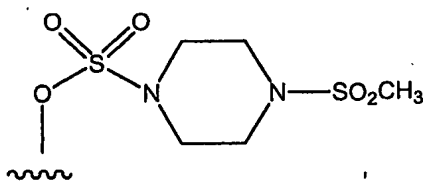
,

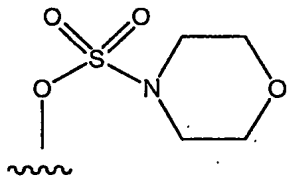


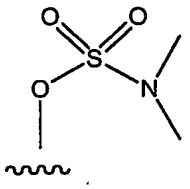
and



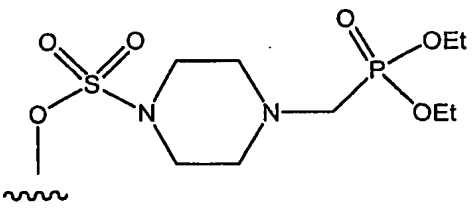
23. The compound of claim 21 wherein R^1 is selected from the structures:





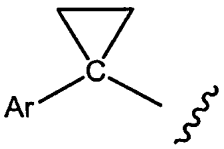


and

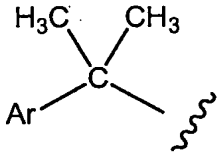


24. A compound of claim 1 wherein R^1 comprises a phosphonate prodrug moiety.

25. The compound of claim 1 wherein R^3 or R^4 is selected from the structures:

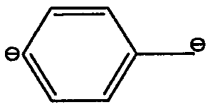


and



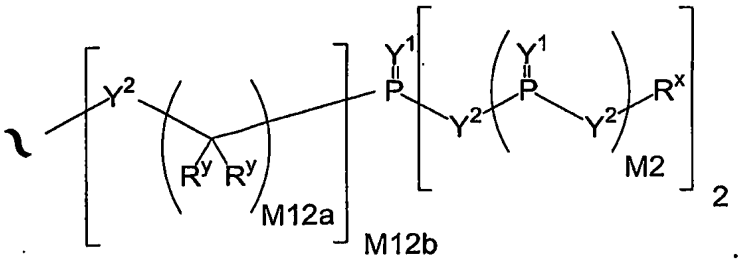
26. The compound of claim 6 wherein L is arylene.

27. The compound of claim 6 wherein L is C_1-C_{12} alkylene.

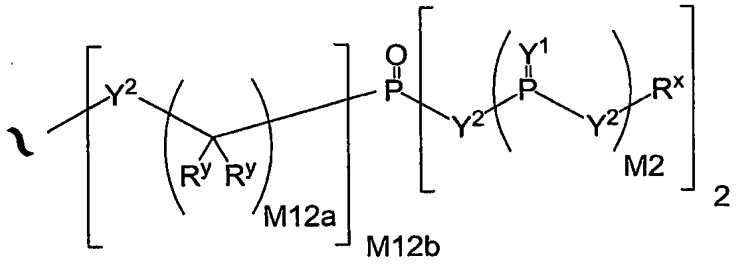
28. The compound of claim 26 wherein L is  .

29. The compound of claim 27 wherein L is C_2 alkylene.

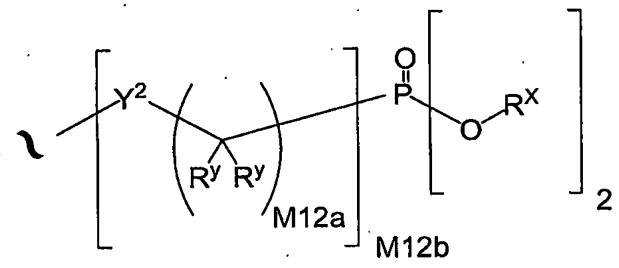
30. The compound of claim 6 wherein A^3 has the structure:



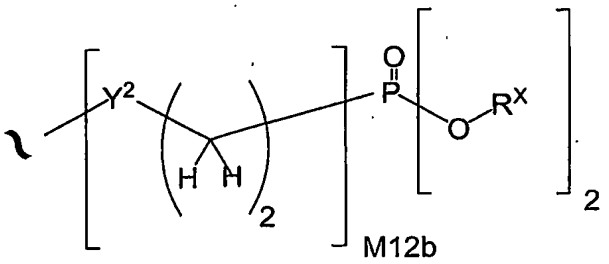
31. The compound of claim 6 wherein A^3 has the structure:



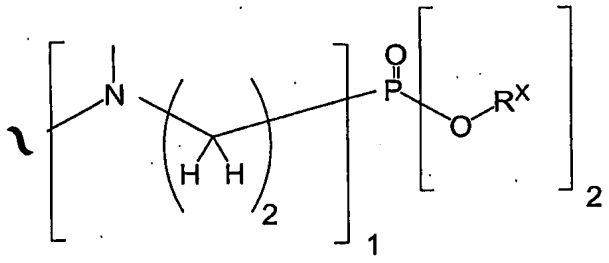
32. The compound of claim 6 wherein A^3 has the structure:



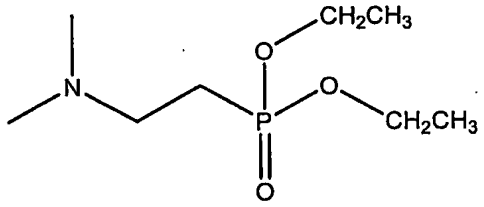
33. The compound of claim 6 wherein A^3 has the structure:



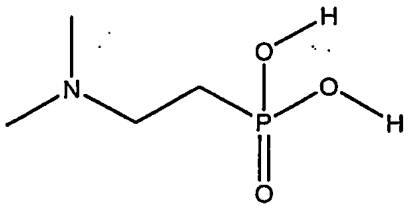
34. The compound of claim 6 wherein A^3 has the structure:



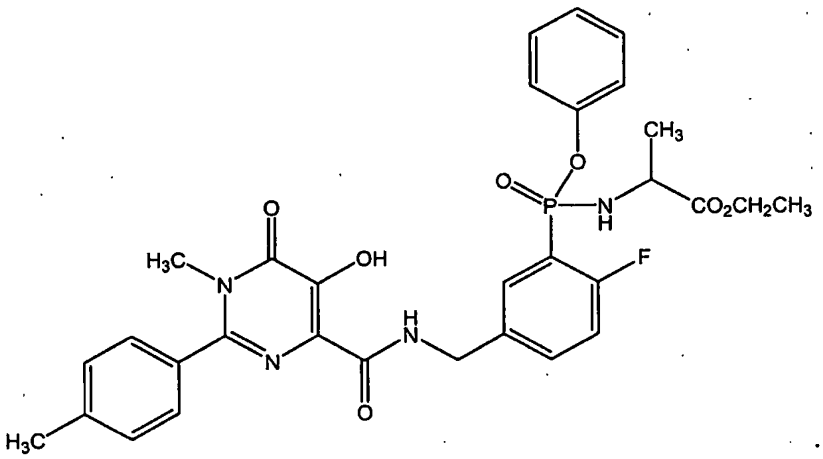
35. The compound of claim 30 wherein A^3 has the structure,



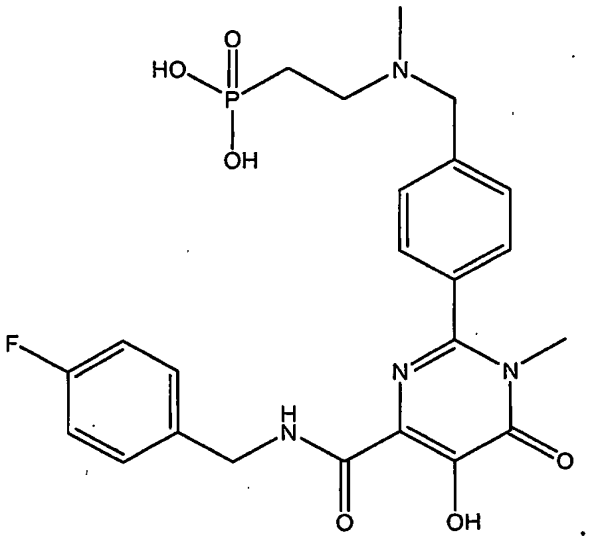
36. The compound of claim 30 wherein A^3 has the structure,



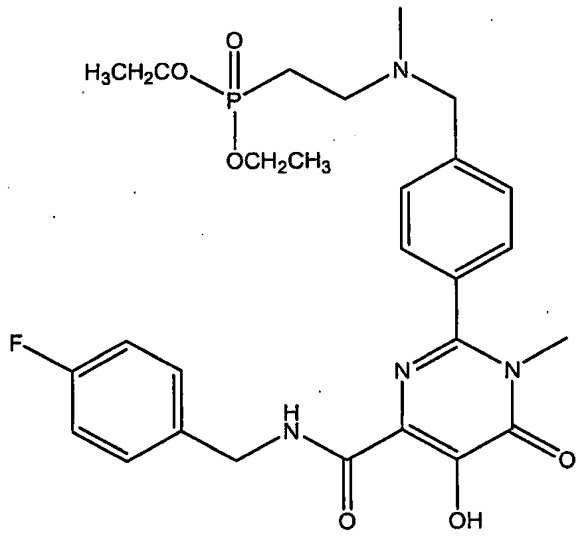
37. A compound of claim 1 having the structure:



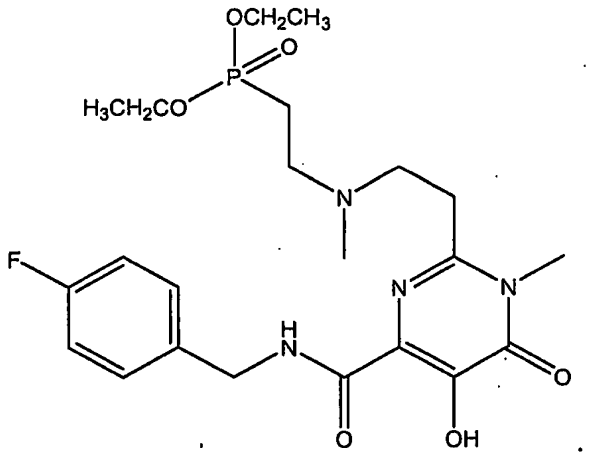
38. A compound of claim 1 having the structure:



39. A compound of claim 1 having the structure:



40. A compound of claim 1 having the structure:



41. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

42. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 in combination with a therapeutically effective amount of an AIDS treatment agent selected from:

(1) an AIDS antiviral agent,

(2) an anti-infective agent, and

(3) an immunomodulator.

43. The composition of claim 42 wherein the antiviral agent is an HIV protease inhibitor.

44. A process for making a pharmaceutical composition comprising combining a compound of claim 1 and a pharmaceutically acceptable carrier.

45. A method of inhibiting HIV integrase, comprising the administration to a mammal in need of such treatment of a therapeutically effective amount of a compound of claim 1.

46. A method of treating infection by HIV, or of treating AIDS or ARC, comprising administration to a mammal in need of such treatment of a therapeutically effective amount of a compound of claim 1.